

# PRESCRIPTION OPTICS PROVIDING A UNIVERSAL LENS FOR AUGMENTED REALITY EYEWEAR

## AMBITIONS

### Create ARE platform






POPULAR aims at **creating an Augmented Reality Eyewear (ARE) platform** for various users and contexts, including professional, leisure, and daily life. These glasses will provide comfort, personal ophthalmic correction, and advanced features like compact design, invisible technology, and low power consumption. **The project combines Human Factors, User Experience, and Lean methodologies** through iterative testing. Demonstrations will occur in **outdoor sports, healthcare, and logistics**.

### Lead ARE market

POPULAR offers a chance for **European industry to lead in the ARE market**, leveraging its strong R&D and innovation capabilities.



## OBJECTIVES

-  **High-performance holographic material** and customizable holographic lens mirrors compatible with any type of corrective lenses .
-  **Ultra-low power (< 8mW) and high-luminance** RGB colour OLED microdisplay devices.
-  **Eyewear system integration with enhanced AR performance**, reduced size.
-  **Demonstrate at TRL5 the short-term deployment potential** and scalability of the proposed solutions/prototypes validated in realistic scenarios especially in healthcare, logistics and outdoor sports sectors.
-  Create societal acceptance and motivate stakeholders and users for adoption, **reaching >80% of acceptance of potential users, including people with disabilities**.

10

PARTNERS

2024  
2026

DURATION

6.3

MILLIONS €

EssilorLuxottica



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UM

UNIWERSYTET MEDYCZNY W ŁODZI

microOLED



Universitat d'Alacant  
Universidad de Alicante



INSTITUTO DE BIOMECÁNICA DE VALENCIA

Orbelgrupo

Tech2heal

UNIVERSITÉ HAUTE-ALSACE

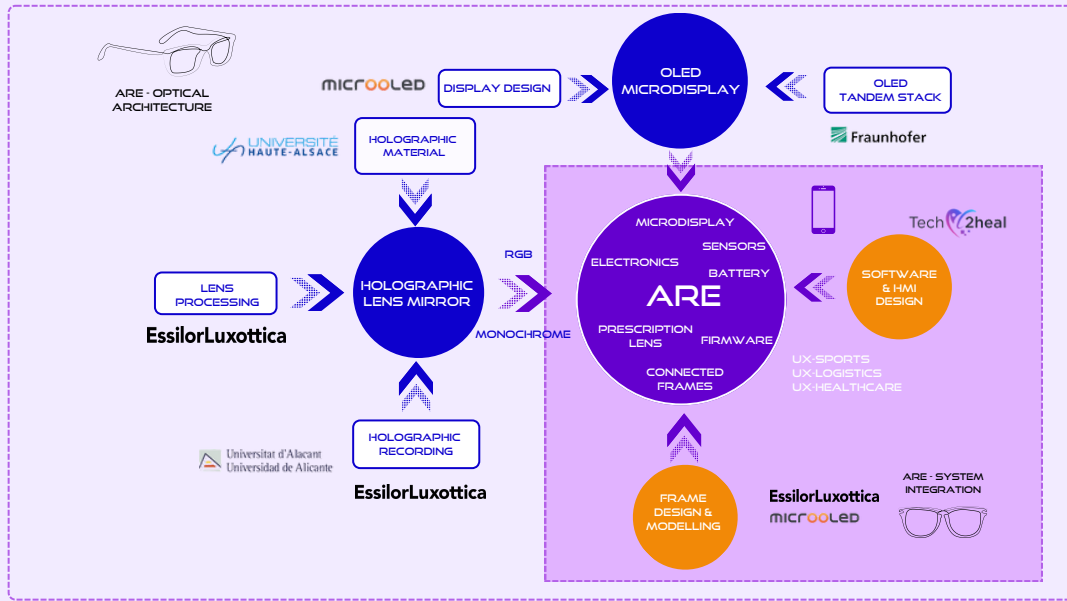
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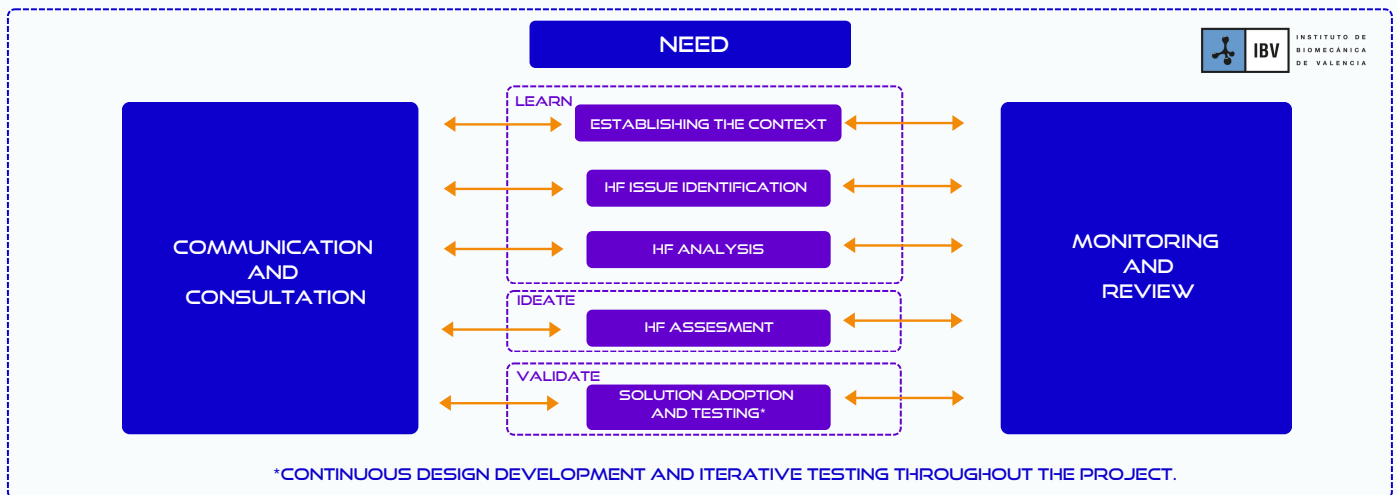


# METHODOLOGY

## 1 MULTIDISCIPLINARY AND SYSTEM-ENGINEERING APPROACH.



## 2 HUMAN DRIVEN DESIGN AND SOCIAL INNOVATION COMBINING HF, UX AND LEAN, AND TAKING INTO ACCOUNT ALL USERS AND STAKEHOLDERS IN A WIDE SENSE.



(Jose Laparra-Hernandez et al., 2024)

# APPLICATIONS

**HEALTH**  
TRAINING IN SURGERY ROOM

UNIVERSYTET MEDYCZNY W ŁODZI

**LOGISTICS**  
EFFICIENCY AND ACCURACY FOR PICKING PROCESS

**SPORTS**  
ROWING TRAINING OPTIMIZATION

# CONTACT

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POPULAR - EU PROJECT

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